



*Rewarding Learning*

General Certificate of Secondary Education  
2011

---

## **Manufacturing**

Paper 2  
Assessment Unit 3  
*assessing*  
Manufacturing Technology  
**[GMA32]**  
**THURSDAY 23 JUNE, MORNING**

---

# **MARK SCHEME**

- 1 (a) Very durable wood  
Other answers considered [2]
- (b) Using CNC to make the wood joints  
Other answers considered [2]
- (c) High set up cost  
Other answers considered [2]
- (d) Quick to model different panel doors on screen to suit the clients requirements  
Ideas can be modified  
Ideas can be saved and sent electronically (Remote manufacturing)  
Fast  
Other answers considered [2 × 2] [4]
- (e) (i) Quality assurance is the achievement of the required quality standards of the finished product before despatching it to the customer or storage. It is achieved by creating and maintaining a quality system within the manufacturing organisation. [1]
- (ii) Quality control is achieved by establishing the expected quality standards required by the customer, and then planning to achieve those standards. As the product is manufactured it is inspected and if necessary corrective action is taken to ensure that the expected quality standards are met. [1]  
Other answers considered [2]
- (f) Robust natural material  
More resistant to decay  
Gives a high end finish  
Stronger material  
Other answers considered [2]
- (g) Panel doors are more easily marketed worldwide due to the internet  
Other answers considered [2]
- (h) Fast  
Accurate  
Other answers considered [2]
- (i) To allow product development.  
To keep up with competitors  
Other answers considered [2]
- (j) Appropriate diagram showing one wood working jointing technique that is used in the manufacture of panel doors, to join the vertical stile board with the horizontal top rail.  
Marks will be awarded for
- Detail contained in sketches [4]
  - Quality of sketches [3]
  - Detailed notes [3]
- [10]

AVAILABLE  
MARKS

(k) Appropriate diagram showing how a panel is held in place in a panel door.

Marks will be awarded for

- Suitability of chosen method [4]
- Quality of sketches [3]
- Detailed notes [3]

[10]

**Total**

AVAILABLE  
MARKS

40

**40**